



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,210	01/22/2004	Kimio Nagasaka	118318	2747

25944 7590 09/20/2005

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

BLEVINS, JERRY M

ART UNIT	PAPER NUMBER
----------	--------------

2883

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/761,210	Applicant(s) NAGASAKA ET AL.	
	Examiner Jerry Martin Blevins	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 21-23 is/are allowed.
- 6) ☒ Claim(s) 10, 12, 18-20, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 11 and 13-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>14 February 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the present case, the abstract exceeds the maximum allowable limit of 150 words.

Appropriate correction is required.

### ***Claim Objections***

Claims 14-16 are objected to because of the following informalities:

Regarding claims 14 and 15, the "reflective portion" has no antecedent basis in the indicated base claim 10. For examination purposes, examiner interprets claims 14 and 15 to depend from claim 11.

Regarding claim 16, a first and a second lens are not present in the indicated base claim 10, therefore, the "third lens" of claim 16 lacks antecedent basis since it

Art Unit: 2883

implies the presence of a first and a second lens. For examination purposes, examiner interprets claim 16 to depend from claim 15.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10, 12, 18-20, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent to Pommer et al., number 6,910,812.

Regarding claims 10 and 12, Pommer teaches an optical module, comprising: a transparent substrate (Figure 6E, element 17), which has optical permeability to the wavelength of the light used; an electro-optical element (Figure 6E, element 19), which is arranged on one surface side of the transparent substrate and radiates signal light toward the other surface side of the transparent substrate according to a provided electrical signal, or which generates an electrical signal according to the luminous intensity of signal light provided from the other surface side of the transparent substrate; an optical transmission line support member (Figure 6E, element 226), which is arranged on the other surface side of the transparent substrate and supports one end of

Art Unit: 2883

an optical transmission line; and an optical coupling member (Figure 2C, element 1), which is arranged on the other surface side of the transparent substrate and performs optical coupling between the electro-optical element and the optical transmission line, either the optical transmission line support member or the transparent substrate (coupling member) has a guide pin (Figure 6E, element 72), while the other one has a guide hole (Figure 6E, element 71), in which the guide pin is to be inserted, and the diameter of the guide hole is made larger as compared with the diameter of the guide pin so that a gap is produced between the guide pin and the guide hole (Figure 15), and the gap between the guide pin and the guide hole is filled up with a predetermined filler material (Figure 15, elements 84, 125, and 228). (Also see abstract, column 8, lines 25-51, column 33, lines 13-27, column 46, lines 55-64, Figures 5B, 9, 12A, and the sections of the disclosure related to the above figures).

Regarding claims 18-20, Pommel teaches the optical module of base claim 10. Pommel also teaches a hybrid integrated circuit (Figure 1, element 100), a hybrid circuit board (Figures 4-6, element 35), and an electronic apparatus (column 10, lines 44-67) comprising the optical module of claim 10.

Regarding claim 24, Pommel teaches an opto-electricity mixed device, comprising: a circuit board having a conductive film that transmits an electrical signal (Figure 6E, element 35) and an optical transmission line transmitting signal light (held in ferrule 226, Figure 6E); and a hybrid integrated circuit chip (Figure 6E, element 19), which is coupled to the circuit board and converts the electrical signal into the signal light, or vice versa, either the circuit board or the hybrid integrated circuit chip having a

Art Unit: 2883

guide pin (72), and the other having a guide hole (71), in which the guide pin is to be inserted and whose diameter is made larger as compared with the diameter of the guide pin so that a gap is produced between the guide pin and the guide hole (Figure 15), and the gap between the guide pin and the guide hole is filled up with a predetermined filler material (Figure 15, elements 84, 125, and 228).

Regarding claim 25, Pommel teaches the limitations of the base claim 24. Pommel also teaches a transparent substrate (Figure 6E, element 17), which has optical permeability to the wavelength of the light used; and an electro-optical element (Figure 6E, element 19), which is arranged on one surface side of the transparent substrate and radiates signal light toward the other surface side of the transparent substrate according to a provided electrical signal, or which generates an electrical signal according to the luminous intensity of signal light provided from the other surface side of the transparent substrate, the guide pin or the guide hole being formed on the transparent substrate.

### ***Allowable Subject Matter***

Claims 1-9 and 21-23 are allowed.

Claims 11 and 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claims 1, 3, 6, and 7, Pommel teaches a method of manufacturing an optical module including a transparent substrate having an electro-optical element on one surface side, an optical transmission line support member, which is arranged on the other surface side of the transparent substrate and supports one end of an optical transmission line, and an optical coupling member, which is arranged on the other side surface of the transparent substrate and has a role of optical coupling the electro-optical element with the optical transmission line, the method comprising: forming a guide pin in either the optical transmission line support member or the transparent substrate (optical coupling member) and forming a guide hole, in which the guide pin is to be inserted, in the other one of the optical transmission line support member or the transparent substrate (optical coupling member), in which the guide pin is not formed, such that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide. (See the above rejections). Pommel does not teach the further method steps listed in claims 1, 3, 6, and 7. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious the further method steps listed in claims 1, 3, 6, and 7.

Claims 2, 4, 5, 8, and 9 are allowed based on their dependence on allowed base claims.

Regarding independent claims 21 and 22, Pommel teaches a method of manufacturing an opto-electricity mixed device, including: a circuit board, having a conductive film that transmits an electrical signal and an optical transmission line having

Art Unit: 2883

a roll of transmitting signal light; and a hybrid integrated circuit chip, which is coupled to the circuit board and has a role of conversion between the electrical signal and the signal light, the method comprising: forming a guide pin in either the hybrid integrated circuit chip or the circuit board, and forming a guide hole, in which the guide pin is to be inserted, in the other one of the hybrid integrated circuit chip or the circuit board, in which the guide pin is not formed, such that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide. (See the above rejections). Pommel does not teach the further method steps listed in claims 21 and 22. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious the further method steps listed in claims 21 and 22.

Claim 23 is allowed based on its dependence on allowed base claim 21.

Regarding claims 11 and 13, Pommel teaches the limitations of the base claims 10 and 12, respectively. Pommel does not teach the further limitations of claims 11 and 13. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious the further limitations of claims 11 and 13.

Claims 14-17 are objected to based on their dependence on objected base claim 11.



Art Unit: 2883

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB

  
Brian Healy  
Primary Examiner